Monitoring

- IDLH
  - Oxygen Deficiency
    - Oxygen Level Meter
  - Fire and Explosion
    - Explosimeter
  - Highly Toxic Contaminants
    - Contaminant Specific

Monitoring

- Volatile Organic Contaminants
  - Photo Ionization Detectors
    - Measurement based on UV light ionization
    - Standard gas (usually isobutylene) calibration
    - Screening level measurements at best
- Action Levels have to account for screening nature of instruments

Monitoring

- Volatile Organic Contaminants
  - Flame Ionization Detectors
    - Measurement based on flame ionization
    - Standard gas (usually methane) calibration
    - Screening level measurement at best
- Action levels have to account for the screening nature of the instruments.

Monitoring

- Volatile Organic Contaminants
  - Integrated Sampling
    - Standard laboratory analytical techniques
    - Very accurate assessment of exposure
- Integrated sampling methods are not real-time. Adjust work practices and real-time monitoring accordingly.

Monitoring

- Dust
  - Light Scattering Devices
    - Measurement based on dust scattering light
    - Instruments biased toward small particles
  - Dust action levels have to account for the screening nature of the instrument

Monitoring

- Integrated Methods
  - Standard laboratory analytical techniques
  - Very accurate assessment of exposure.
- Integrated methods are not real-time. Adjust work practices and real-time monitoring accordingly

Monitoring

- IDLH monitoring instruments are specific to hazards and accurately assess hazards
- Real-time dust and VOC monitoring instruments are for action level screening
- Integrated methods for VOCs and dust-borne contaminants are accurate
- Some projects may require both real-time and integrated methods for VOCs and dust-borne contaminants to be practical and safe.